

**PROTECTION AGAINST SURGES OF ELECTRIC CURRENT**

**ABSTRACT**

A positive temperature coefficient (PTC) device is connected in parallel with the circuit breaker of e.g., a power-conditioning circuit. Such an arrangement allows pre-  
5 charging of the capacitors in the circuit while the circuit is switched off, so that a current surge is avoided when the circuit is powered on. In the event of overcurrent due to a circuit fault, the PTC device will switch to a high-resistance state, which will protect the circuit.